
VICTORIAN ENTOMOLOGIST

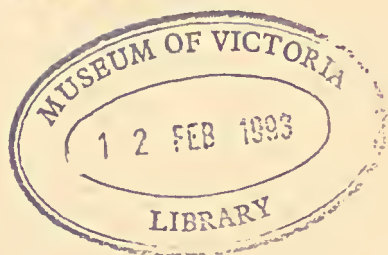


VOL. 23 No. 1

FEBRUARY 1993

Registered by Australia Post • Publication No. VBG 0277

Price: \$3.00



MUSEUM OF VICTORIA



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News Bulletin of The Entomological Society of Victoria Inc.

THE ENTOMOLOGICAL SOCIETY OF VICTORIA (Inc) MEMBERSHIP

Any person with an interest in entomology shall be eligible for Ordinary membership. Members of the Society include professional, amateur and student entomologists, all of whom receive the Society's News Bulletin, the Victorian Entomologist.

OBJECTIVES

The aims of the Society are:

- (a) to stimulate the scientific study and discussion of all aspects of entomology,
- (b) to gather, disseminate and record knowledge of all identifiable Australian insect species,
- (c) to compile a comprehensive list of all Victorian insect species,
- (d) to bring together in a congenial but scientific atmosphere all persons interested in entomology.

MEETINGS

The Society's meetings are held at Clunies Ross House, National Science Centre, 191 Royal Parade, Parkville, Victoria, at 8 p.m. on the third Friday of even months, with the possible exception of the December meeting which may be held earlier. Lectures by guest speakers or members are a feature of many meetings at which there is ample opportunity for informal discussion between members with similar interests. Forums are also conducted by members on their own particular interest so that others may participate in discussions.

SUBSCRIPTIONS

Ordinary Member	\$20.00
Country Member	\$16.00 (Over 100 km from GPO Melbourne)
Student Member	\$12.00
Associate Member	\$ 5.00 (No News Bulletin)

No additional fee is payable for overseas posting by surface mail of the news bulletin. Associate Members, resident at the same address as, and being immediate relatives of an ordinary Member, do not automatically receive the Society's publications but in all other respects rank as ordinary Members.

Cover design by Alan Hyman.

Cover illustration of *Ogyris* sp (♀) (Lake Douglas, nr Kalgoorlie, WA) by Jenny Browning.

MINUTES OF GENERAL MEETING, 11 DECEMBER 1992

The Vice-President, Beresford Vardy, opened the meeting at 8.10pm.

Present: J. Burns, P. Carwardine, K. Clark, M. & P. Coupar, D. Dobrosak, I. Endersby, A. & E. Farnworth, P. Kelly, D. & J. Holmes, M. Malipatil, M. Schutze, D. & N. Stewart, R. Vagi, B. Vardy, K. Walker.

Apologies: D. Crosby, R. Field, M. Hunting, T. Morton, T. New.

Minutes: Minutes of the October General Meeting (*Vic. Ent.* 22(6): 125-126.) were accepted (Stewart & Malipatil) and passed.

The December meeting is a members' exhibit night and the Vice-president asked for exhibits to be presented.

General Business

Exhibits: 1. David Holmes showed a series of Nymphalidae butterflies. Some had been collected on a recent trip to coastal New South Wales. In particular, David had been keen to collect the various subspecies of *Tisiphone* that occur in this area.

2. Ian Endersby presented a series of slides representing interests of various members. All slides had been taken in the Montmorency area and Ian entertained the meeting with his speculations on what the insects were doing in his "action" photographs.

3. Mike Coupar also presented a series of slides which he titled "In search of a New Species". The slides took us to Antonio Park, Mitcham where a search amongst grass stems uncovered an undescribed species of *Pterolocera* (Lepidoptera: Anthelidae) moth. Ken Fairy had confirmed the undescribed status of the species and has been sent pinned males and the associated wingless female. Mike showed photographs of all stages of the life cycle.

4. Mark Schutze displayed a case of insects which he had collected on a recent trip to south east Queensland. Many orders of insects were represented and all had been correctly set, labelled and identified. Mark fielded many questions from the meeting on his collection.

5. Ken Walker showed a live South American Theraphosine "tarantula" spider recently seized by quarantine from a Geelong residence. Eight such spiders had been collected and were under quarantine at the Zoo, however, a permit was issued for Ken to display one spider at the meeting. Ken also showed another large (diagonal leg span of 22cm) Theraphosine

mounted inside a glass display case.

6. David Holmes informed the meeting of a Japanese beetle collector who wishes to exchange specimens, in particular Cicindelidae, Cerambycidae and Oedemeridae. In return, the Japanese collector is able to exchange specimens from Japan, Taiwan and south east Asia. The contact address is:

Hideo Akiyama
1051 Mutsu-ura-chô
Kanazawa-ku.
Yokohama 236
Japan.

7. Joy Burns reported on a recent conversation with Shelly Barker on an undescribed species of Buprestidae from Western Australia. Gordon and Joy had taken the first three specimens and recently another 5 specimens had been collected. Unfortunately the male of the species remains unknown.

8. Ken Walker informed the meeting of developments regarding the drafting of a permit for the Society to collect invertebrates listed under the *Flora and Fauna Guarantee Act, 1988*.

9. Several members contributed details of various sightings and observation ranging from lizards to admiral butterflies.

Correspondence: Detailed and accepted (Carwardine/Kelly).

Treasurer's Report: Financial Statement for 11 December 1992 was received as follows:

General Account	\$1984
Le Souef Award Account	\$2136
Junior Encouragement Fund	\$ 491

Membership	
Country	63
Metropolitan	37
Student	4
Life	3
Associate	5
Subscribers	12

Received Endersby/Holmes

Editor's Report: M. Malipatil reported on a new format of the front cover. He showed three different colours and textures and requested the meeting to assist with the decision. An interstate member with graphic art skills, Mr. Alan Hyman, submitted a new design for the front cover. The meeting discussed various minor changes and inclusions and was again requested

to decide on acceptance of this design. Both cover colour/texture and design were circulated and the decision was put to the vote at the end of the meeting. The meeting decided to accept the dark yellow cover and the Alan Hyman design (with minor alterations). Mali also urgently requested more articles as there was only one in hand.

Excursions: Peter Carwardine gave final details for the February excursion to Licola. Those involved should bring linen, food and cooking utensils.

Other Business: 1. Election:

Mr. Alan Kellehear for ordinary membership. Elected by a call for a show of hands.

Nomination:

Michael Barnett, Helensvale, Qld, for country membership

Nominated by: Ken Walker.

Seconded by: B. Vardy

In accordance with the Society rules, the election will be held over until the following general meeting.

2. Beresford Vardy announced to the meeting that Mr. Peter Kelly was the recipient of the current Zoo LeSouëf Memorial Award. Peter received a round of applause and thanked the Society.

3. Mark Schutze was awarded a \$25 Junior Encouragement award. To earn the award Mark had attended two meetings this year and presented an exhibit. Mark thanked the Society and indicated he would purchase more insect collecting equipment with the prize money.

4. As indicated in the Editor's report, the meeting decided on the new front cover and design. Peter Kelly (seconded by Mali Malipatil) proposed a vote of thanks to Alan Hyman for his design of the new cover. This was carried with acclamation.

The meeting was closed at 9.45pm. The Vice-President thanked members for their attendance and wished all a safe and Merry Christmas.

**A NEW LOCALITY FOR *HEMIPHLEBIA MIRABILIS* SELYS
(ODONATA : HEMIPHLEBIIDAE)**

Ian D. Endersby
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The damselfly *Hemiphlebia mirabilis* Selys is the only species in its family. Fraser (1955, 1957) recognised primitive wing venation dating back to the Permian: post-nodals which are not aligned with the veins behind them, and an open discoidal cell in the forewing. It is a small, metallic green insect in which the males have white, expanded, inferior anal appendages. the male displays to the female by flexing its abdomen in the vertical plane (Tillyard 11913) and spreading its appendages in a v-formation (pers. obs.). Its usual habitat is reed beds on a swamp margin and it is generally only the white flag-waving behaviour which renders the cryptically coloured species visible.

Known originally only from a restricted site at Alexandra, Victoria (Billingham 1900) and collected there over subsequent years by Tillyard, Burns, Neboiss, and Dobson, it was, until recently considered to be a Victorian endemic. Thought to be extinct at Alexandra since the mid-1970's, a new colony was discovered at Wilson's Promontory in 1985 (Davies 1985). In 1992 a colony was found in the Mt William National Park in northeast Tasmania. This was first reported in *Myrmecia* [28 (3): 21, Aug 1992]. Subsequently Trueman *et al.* (1992) included the Tasmanian sightings in a review of the earlier Victorian observations and recent re-discoveries at Yea and Alexandra.

Having seen the species at Wilson's Promontory, and then read of the Tasmanian extension to its range, it seemed to me that suitable habitat could also exist on the geologically similar Furneaux Group in Bass Strait.

Between 27 November and 4 December 1992, I searched all of the readily accessible wetlands on Flinders Island, but with no success. It requires local knowledge and a four wheel drive vehicle for a thorough survey. Before leaving the island I described the species to District Ranger, Colin Spry and subsequently sent him a photograph that I had taken of a male at Wilsons Promontory, and copies of Trueman *et al.* (1992) and Endersby (1992).

On 7 January 1993, while conducting a survey of glaxiid fish, Colin Spry and Stuart Chilcott of Inland Fisheries discovered *H. mirabilis* at two swamps, 20 metres apart, on the eastern side of Flinders Island. On 9 January they found another site in the Wingaroo Nature Reserve. All specimens observed occurred at the fringes of swamps amongst *Juncus* sp. and were recognised by their tail waving behaviour after being flushed from deep in the rushes. In each case the vegetation consisted of stunted *Melaleuca*, *Juncus* sp. and *Galinia grandis* and the swamps were up to a metre deep.

I received a specimen from Flinders Island on 28 January and can confirm that colouration, wing venation, and anal appendages are consistent with the characteristics given for the species in Watson *et al.* (1991) and with the specimens that I had seen at Wilsons Promontory. That specimen has now been forwarded to ANIC and Colin Spry has lodged two specimens with the Queen Victoria Museum, Launceston.

Bass Strait was formed in the Oligocene or Miocene (20 - 30 MYA), but in the last million years Tasmania has generally been connected to Victoria. Bass Strait has opened as a seaway

at least eight times, most recently between 13500 & 12000 BP (Barlow 1981). The discovery of extant populations of *H. mirabilis* in Victoria, Flinders Island and Tasmania, raise interesting biogeographical questions about their dispersal and continuity in the recent geologic past. How many glaciations have they weathered and where were they in Gondwanan times?

Acknowledgments

Congratulations to Colin Spry and Stuart Chilcott on their important discovery and my thanks for the specimen for identification. Thanks also to my wife, Margaret, for assistance in our Flinders Island survey.

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OVIPOSITION AND TERRITORIAL BEHAVIOR IN *TRAPEZITES SYMMOMUS*
SYMMOMUS HÜBNER (LEPIDOPTERA: HESPERIIDAE: TRAPEZITINAE)

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Abstract: The oviposition behavior of *Trapezites symmokus symmokus* Hübner in south-eastern Queensland is described and discussed. Females oviposit on items away from the host plants after minimal contact with the host. Aspects of behavior, relating to territoriality and diurnal resting are detailed. Male territorial behavior, whether perching or patrolling, depends on the time of day.

Introduction

Trapezites symmokus is a widespread skipper in eastern Australia. I have encountered the nominate subspecies at seven sites, comprising Nathan in south-eastern Queensland, Mount Warning National Park, Dudley, Jenolan Caves (Dunn 1978), Cabbage Tree Creek [near Batemans Bay] and Congo Point in New South Wales and at Buchan Caves in far eastern Victoria, albeit I have records of this subspecies from at least 127 sites within the confines of its distribution. Both sexes are similar and can be distinguished from allied species by their large and robust appearance and the distinctive markings of the hindwing underside. In the McPherson phytogeographic region (see Dunn & Dunn 1991 p.59) adults are present from August to April with occasional individuals present in July and May in favourable seasons (Dunn & Dunn 1991 p.160). On the Griffith University campus at Nathan, adults are numerous in spring. This generation emerges in early September but by December only females remain. The species is locally abundant on campus and the population numbers have been undoubtedly enhanced by ornamental plantings of the larval host, *Lomandra longifolia* (Xanthorrhoeaceae), along walkways and in small covered gardens under building eaves and window ledges. In the adjacent woodland areas the host is sparsely distributed (Coutts pers. comm.).

Observations

Male territorial behavior: At Nathan, males exhibit both patrolling and perching territorial behavior which depends on the time of day. Before midday, males regularly patrol the breeding areas by flying slowly, low down, amongst host plants and shrubbery, moving between the *Lomandra* blades, presumably in search of newly emerged females, which probably emerge in the early morning. This behavior is appropriately described as 'patrolling' as it is very similar to the behavior of males of various other butterflies which continuously patrol hilltops and only stop briefly for rest or nectar (Common & Waterhouse 1981). Unique among the *Trapezites*, *T. symmokus* males do not aggregate on summits (Common & Waterhouse 1981), but instead patrol the breeding areas.

Unlike the ovipositing female described later, I have not observed males colliding with the host and when settling, an infrequent occurrence during patrolling sessions, they do so with minimal disturbance to the blade. Even then patrolling males alight only momentarily. Moreover, little effort appears to be expended challenging intruding males. The intruding conspecifics retreat quickly upon being approached and are followed by the patrolling male for only about a metre before the male returns to re-commence patrolling the hosts.

Male behavior then appears to change markedly after about noon. Much of the afternoon is spent actively defending perch sites and associated territories, the males racing off at high speed after intruders and soon return to perch again with wings fully closed. This behavior appears similar to many other perching butterfly species. Perch sites are established near the host plants rather than at foraging sites, often in the same areas where the patrolling territorial behavior occurs earlier in the day. If disturbed, perching males make one or more surveillance flights around their territory before returning to re-settle in the general area, but not normally on the exact same branch or leaf like the perching *Trapezites maheta* consistently do on campus.

Resting behavior: About an hour after midday, during very humid and hot weather in November 1992, I observed a female, which settled horizontally, facing away from the sun, with wings closed on low herbage in filtered sunshine. The female then appeared to sleep for at least five minutes (timed). During this time she was stimulated only by obvious shadows or very close flying insects (within 1cm) both of which resulted in momentary wing flickering. The movement of my fingers near her eyes (within 3-4cm!) was seemingly not registered. This contrasted the normal alertness of these skippers which anyone familiar with collecting skippers will realise. After five minutes I made direct contact with the antennae which instantly revived the adult to full alertness and my subsequent movements caused her to take to flight. She then settled again, this time in a vertical plane facing upward, on a leaf well out of reach on a tree about five metres away, where this behavior appeared to be recommenced but I was unable to confirm this. The butterfly selected a swampy locality, amongst vine thicker along Mimosa Creek for this sleeping behavior: an area of denser habitat where I have seen very few adults but which is within 100 metres of the breeding sites where the adults are congregated.

Female ovipositing behavior: On 7 December 1992 at about 1:40 pm EST a female of *T. symmopus*, in reasonable condition, was observed during a sunny break. Species identification was confirmed after she settled to oviposit. She was first seen flying nearby in characteristic trapezitine flight, appearing as a rusty orange triangular 'V' shape. After a couple of large arcing flights covering some 10-20m at a height of about 2m above ground, the female rapidly darted toward me dropping gradually to 1m above ground level, then sharply cornered and headed toward two conspicuous 1m high *Lomandra longifolia* (with a smaller clump about 30cm high) growing in one of the shaded concrete container gardens elevated 1m above ground.

After flying just over and about the hosts (about 1m above the elevated garden), the female slowed abruptly as she commenced a brief and rather clumsy fluttery flight. In flight she made physical contact with the leaves of the grass and reduced height to 30-40cm above a clear area between the large and smaller grass.

The female continued fluttering between and around the host for several seconds, once again colliding with blades, before flying out about 1m and settling on the side of the concrete encasement, facing upwards. Her wings remained closed, erect above the body, her abdomen extended slightly near the posterior end and she deposited a single egg. Apart from abdominal movement the female remained motionless. She then recommenced the fluttery flight, this time without colliding with the host, and landed about 30cm from the nearest host butt where a second egg was deposited, on a large piece of tan bark. The female then departed at a rapid 'cross-country' speed and was lost from sight.

The above observations from the first sighting to departure took about 20 seconds and time of each oviposition from the moment of settling until take off involved 4-5 seconds (estimated). The weather was humid with periods of sunshine interspersed with brief showers, and some preliminary thunderstorm activity, with a temperature of about 28-31°C. The host plants were situated in full shade created by an awning, erected for the purpose of shading walkways.

Discussion of ovipositing behavior

Very little information concerning the oviposition behavior of Australian skippers is available in the literature. Egg laying and associated behavior has been recorded for three other trapezitine skippers, *Procidosa polysema* (Atkins 1973), *Hesperilla flavescens* (Atkins & Dunn 1986) and *H. malindeva* (Dunn & Manskie 1988). The reported crawling behavior of *H. malindeva* is very similar to that of *P. polysema* but, surprisingly, this behavior is seemingly absent in the congener *H. flavescens* (Atkins & Dunn 1986, Dunn unpubl.).

In *T. symmonus* the exact oviposition site is either not selected, or is selected visually during flight since no crawling or walking occurs after settling in this species. Although the female did not land on the host plant as occurred in the above three trapezitine skippers, eggs may sometimes be deposited on the host (Common & Waterhouse 1981), in which case they are usually placed on or between the spikes of flowers on the seed head (Atkins in litt.). The absence of pre-oviposition walking behavior in *T. symmonus* and host examination by brief contacts may typify the anticipated behavior in other trapezitines such as *Signeta flammeata*, *S. symbophora*, *Toxidia riemanni*, *T. andersoni*, *T. doubledayi*, *Anisynta cynone* and *A. tilyardi*, all of which oviposit on debris near the base of the host plant in the field (Common & Waterhouse 1981, Atkins 1988, Atkins, *et al.* 1991, Atkins in litt.).

Oviposition in *T. symmonus* is rapid and uncomplicated. Minimal time is spent by the female examining the host, presumably by momentary contacts whilst in flight and it is not clear whether these are even intentional. Blade contact is achieved with at least her forewings and perhaps also with the tarsi or antennae although this was not seen because of her continued flight activity and the brevity of the collisions. It was clear that some physical contact with the blades of the hosts occurred as they moved several centimetres. Eggs were laid singly, previously noted by Common & Waterhouse (1981), and the oviposition sites were about 1m apart. Oviposition took place in full shade contrasting the behavior of *H. flavescens* (Dunn unpubl.) and *H. malindeva* (Dunn unpubl.) and presumably *P. polysema* (details not recorded). The female made no attempt to oviposit a third time in the general area.

The females' choice of oviposition sites on objects and debris away from the host compels first instar larvae to crawl considerable distances to locate their food. The hosts were planted in a linear fashion and in all other directions extensive areas of concrete walkways are present where even a mature larva if deposited would be unlikely to find any greenery, if only for the purpose of shelter from predators and heat. However, first instar larvae are very active (Atkins in litt.) and may be guided by olfactory cues.

Oviposition on inanimate objects away from the host may be a strategy to reduce losses by discovery by egg parasitoids but reduces the probability of the first instar larva finding the host. Interestingly, however, the egg laid on the concrete encasement was later found to be parasitized, so perhaps the female is stimulated to oviposit after contact with the host, and is then unable to differentiate the substrates and subsequently oviposits wherever she lands. This would explain the deposition of eggs on both debris and the host plant.

Acknowledgement

Thanks to Andrew Atkins (University of Newcastle) and Ian Faithfull (Institute of Plant Sciences) for their comments on this communication, and Bob Coutts (Griffith University) for confirming the identification of the *Lomandra* species involved.

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A NEW FOOD PLANT RECORD FOR *HYPOCHRYSOPS THEON MEDOCUS* (FRUHSTORFER) (LEPIDOPTERA : LYCAENIDAE)

David Lane
3 Janda Street, Atherton, Qld 4883

Introduction

The epiphytic fern *Platynerium hillii* (Polypodiaceae) is here recorded as a foodplant for the lycaenid butterfly *Hypochrysops theon medocus* (Fruhstorfer) at Iron Range, northern Queensland.

Observations and Discussion

Hypochrysops theon is a striking and well known species of butterfly, occurring in northern Queensland as two sub-species - *H. theon medocus* (Fruhstorfer) from the Rocky River, north of Silver Plains (Sands 1986).

Larvae of this butterfly are known to feed upon the fronds and within the rhizomes of the epiphytic or terrestrial fern *Drynaria quercifolia* (Polypodiaceae), and are attended by the small ant *Philidris cordatus* (= *Iridomyrmex cordatus* (F. Smith)) (Common & Waterhouse 1981, c.f. Atkins 1992). *D. quercifolia* is a climbing fern which attaches itself either to tree trunks or boulders on the rainforest floor, and usually has a growth habit that does not see the plant extend much more than about two metres above ground level. The larval feeding behaviour of skeletonising the fronds of this fern gives the plant a "scorched" appearance, especially when larvae are numerous.

During a visit to Iron Range in July 1992, it was of considerable interest to observe a typical skeletonising feeding pattern on the fronds of the epiphytic fern *Platynerium hillii*. A close examination of this plant revealed numerous hatched eggs on the base of fronds and on nest leaves, together with nest leaves. Numerous *P. cordatus* ants were in attendance of these larvae. These larvae were transferred to Atherton and successfully reared through on *P. hillii*.

The *P. hillii* was growing in the fork of a rainforest tree about four metres above ground level, and in an area surrounded by *D. quercifolia* growing on adjacent tree trunks and surrounding boulders. Much feeding behaviour of *H. theon* larvae was evident on *D. quercifolia* in this general area, with numerous larvae and pupae being located.

The incidence of *P. cordatus* ants and ant colonies in this general area was extremely high, with the ants often utilising the hollowed out rhizomes of *D. quercifolia*, as well as loose bark, rocks and debris as sites to establish colonies. The presence of *P. cordatus* ants on the rainforest tree supporting *P. hillii* may have been a factor in influencing *H. theon* females to oviposit on this fern. It is interesting to learn of an alternative foodplant for this striking species of butterfly.

Acknowledgments

I wish to thank Dr A K Irvine, CSIRO, Atherton for his assistance and identification of *Platycerium hillii*.

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**NATIVE FOOD PLANTS OF THE PUMPKIN BEETLE, *AULACOPHORA*
HILARIS(BOISDUVAL) (COLEOPTERA: CHRYSOMELIDAE: GALERUCINAE)**

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Abstract: Adults of the pumpkin beetle *Aulacophora hilaris* (Boisduval) (Chrysomelidae: Galerucinae) are recorded feeding on flower petals of Australian Hollyhock, *Lavatera plebia* Sims (Malvaceae), flowers of Black Box, *Eucalyptus largiflorens* F.Muell. (Myrtaceae) and fruit of the introduced Burr Medic, *Medicago polymorpha* Linnaeus (Fabaceae).

Introduction

The native pumpkin beetle, *Aulacophora hilaris* (Boisduval) (Chrysomelidae: Galerucinae), is a serious pest of introduced Cucurbitae in New South Wales, particularly in inland areas, and on occasions in parts of Victoria. The adult beetles eat seedlings, leaves, flowers and young fruits of pumpkins, cucumbers, melons, squashes and related plants and when seasons have been drier than normal cherries and figs have also been damaged (Goudie 1927, McKewen 1945, NSW Dept.Agriculture 1973, Hely *et al.* 1982). Goudie (1927) noted damage "not only to the melon tribe, but to other plants as well" when the beetle is abundant.

The NSW Department of Agriculture (1973) reported that a native food plant of the species had not been determined, however Hely *et al.* (1982) stated that wild melons are attacked and "are probably the natural hosts". Jones & Elliot (1986) stated that "leaves, flowers and fruit of many native and exotic garden plants" are eaten.

Observations

On 25 September 1991 *A.hilaris* was observed feeding on flower petals of Australian Hollyhock, *Lavatera plebia* Sims (Malvaceae) at Willandra National Park, New South Wales. Many beetles had aggregated on a single large plant in the camping area near Willandra Homestead. On the same day the species was also observed eating the fruit of the introduced Burr Medic, *Medicago polymorpha* Linnaeus (Fabaceae) on flats beside Willandra Creek and were observed feeding at flowers of *Eucalyptus* (Myrtaceae) along the Creek. On 26 September they were common on flowers of Black Box, *Eucalyptus largiflorens* F.Muell., along Middle Billabong Creek, about 37 km WNW of Hillston, NSW. Beetles at the flowers were feeding but whether nectar or floral parts were consumed was not noted. Three specimens were collected.

Although data labels on specimens of this insect in the Australian National Insect Collection provide no food plant data, specimens from Daly River, Northern Territory, were collected on Noogoora Burr, *Xanthium strumarium* L., Asteraceae (7 Nov.1986, C.Wilson; 30 Aug.1984, G.Flanagan, H.Brown).

The feeding observations confirm that *A.hilaris* adults, like many chrysomelids, are diversely polyphagous, and not restricted to cucurbits. I have not attempted a comprehensive literature search and it is likely that other food plants have often been reported.

Acknowledgement

I thank the curators of Coleoptera at the Australian National Insect Collection for access, enabling confirmation of the species identification.

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INSECT COLLECTING TRIP AND HOLIDAY TO HERVEY BAY, QUEENSLAND

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During the June/July school holidays, my parents and I went up to Queensland's Hervey Bay for a holiday. I saw this as a good chance to capture some Queensland insects for my collection. We drove through towns such as Narrandera, Coonaharabran and Goondiwindi, and the closer we got to Queensland, the warmer the weather.

My first catch was made at Narrandera, which was a cockroach by the name of *Periplaneta americana*, which is more commonly known as an American cockroach. I caught it while we were walking along the main street during the evening, on Sunday 27 June. The next catch was at Tamworth, where I caught a *Tectocoris diophthalmus*, cotton harlequin bug, which I noticed on the ground while we were having our morning tea break. When we arrived at the popular Surfers Paradise, the weather suddenly became warmer, and I knew that I was going to catch something here.

On Tuesday 30 June, I caught a *Delias nigrius*, which is a common jezebel, which was fluttering around our cabin during mid-day a small species of paper wasp, which was sitting inside the laundry between 9.00 and 10.00 p.m., and a decent sized orh weaver which was resting just outside our window.

On Wednesday 1 July, I caught another two *T. diophthalmus*, which were caught between 8.30 and 9.00 a.m.. I also saw quite a few *Nephila* sp., but I didn't collect any.

On Thursday 2 July, at one of our snack spots, I managed to catch a *Melanitis leda banksia*, an evening brown, which was caught quite early in the morning, flying just above the ground, landing frequently. That same day, we arrived at Hervey Bay, where I came across several tiger moths belonging to the species of *Nyctemera amica*, which was my first catch at Hervey Bay.

That Friday, we all went for a drive, and I, naturally, took my collecting equipment. We decided to stop off at a hushland area near Biggenden, called Mt Woowoonga. I caught a couple of *Eurema h. phoebus*, common grass yellows, a *Nephila* sp., and during our sausage sizzle, another specimen of paper wasp.

On Saturday, a *Poecilometis* shield bug was found in the gutter at Hervey Bay at about mid-day.

The next day, Sunday, we went down to a nice, quite beach town called Burrum Heads, which was a good place to go fishing, so, not only did I take my killing jars and butterfly net, I took my fishing rod and tackle box. The fishing was not what you would expect from a place such as Hervey Bay, which is supposed to be one of the best fishing spots in Australia, because we hardly caught any fish the whole time. Anyway, back to entomology. At Burrum Heads, I managed to capture a dragonfly of the species *Pantala flavescens*. There were also dozens more of the same species darting around where I caught this one, and the time was about 2.45

* Mark is a Year 10 student and is the youngest member of our Society (Ed.)

in the afternoon. They were all frequently resting at different heights above the ground, but this particular one was resting about 1 metre from the ground on a tree. Also that day, hut back at the cabin, at about 8.30 p.m., I caught a medium sized noctuid moth just outside the door.

On Monday morning we all went over to Fraser Island on one of the tours, which was quite enjoyable. I took with me my net and some equipment, hoping that the tour guide would not mind if I swooped at the occasional hutterfly. Surprisingly, I only caught a *Hypolimnys nerina*, a common egg fly. I caught this at the lunch break, which was really the only time where I had a chance to do a bit of collecting. There were also quite a few more common egg fly around, both male and female.

My next catch was made on Thursday, when I caught a small, black scorpion, which was hiding under a rotting log, near a place called Wongi National Park. Then we drove down to a place called Walkers Point, which is near the town of Woodgate. At about 3.20 p.m., we saw a *Danaus affinis*, a black and white tiger, fluttering along the beach, and of course, I caught it.

The most impressive insects which I caught were in and around Bundaberg on Saturday 11 July. In the actual town itself, I found and caught a large dragon fly by the name of *Hemianax papuensis*, which was sunning itself on the wall of a toilet block in the centre of Bundaberg. It must have been enjoying the sun because even when I touched it, it didn't budge at all. I also caught a very large grasshopper by the name of *Austracris guttulosa*, spur-throated locust. I later found out that it was female. I found it amongst some tall grass, just beside the Burnett river. We then headed out for Bundaberg Harbour, towards the hulk sugar terminal. There I found another female *A. guttulosa*, except with a slight colour alteration, a *Delias argenthona*, a northern jezebel, which was quite a hard butterfly to catch because it kept on flying up to the top of a particular eucalypt, and I also caught a *Cressida cressida*, big greasy, which seemed to enjoy the taste of bottle brushes. All of these were caught not more than 100 metres from the water.

On Sunday, we went to Toogoom, which is another beach town. I tried fishing there, but was still unsuccessful. Although I caught two small dragon flies by the species of *Diplacodes bipunctata*. I also saw some more *C. cressida*.

My last catches were made on Tuesday 14 July. On that day, I caught another *E. phoebus*, which was a female. I also caught another *A. guttulosa*, except that this time it was a male. I caught that one just behind the beach. It was jumping all over the place, and I had a bit of a hard time catching it.

So, that was the last of my catches for the holiday, with only two whiting caught during three weeks at Hervey Bay, the fishing capital of Australia. Well, that's what they think, but as far as I'm concerned, the insects were much more abundant than the fish.

RECENT ARTICLES OF INTEREST

Compiled by Ian Faithfull, 7/20 Adam Street, Burnley, Vic. 3121.

New, Tim, 1992. **Introductory Entomology for Australian Students**. New South Wales University Press, Kensington. 213x137 mm, 196 pp., \$24.95. Morphology, anatomy, physiology, behaviour, evolution, ecology, insects and people, etc.

Faithfull, I., 1992. **The Natural History and Management of Wattle Park, Burwood. A Report to Melbourne Water by the Field Naturalists Club of Victoria**. FNCV, 42 pp. Lists of Coleoptera, Lepidoptera, other insects and invertebrates, full plant lists, veg. communities, land management issues, etc. Available from the author.

Horne, P.A., 1992. **Comparative life histories of two species of *Notonomus* (Coleoptera: Carabidae) in Victoria**. *Australian Journal of Zoology* 40:163-71. *N. gravis* of W.Vic grasslands and *N. philippi* of Otways & E.Vic woodlands. Peak activity in summer, larvae develop from autumn to spring. Predatory habits, general ecology, potential for biological control.

Hawkeswood, T.J. & Dauber, D., 1991. **Review of the biology and host plants of the Australian longhorn beetle *Agrianome spinicollis* (Macleay) (Col: Cerambycidae)**. *Bulletin and Annals of the Royal Belgium Entomological Society* 127:141-6. E.Qld & NSW species. 20 larval host plants from 12 families. Distribution and habitats.

Hawkeswood, T.J. & Dauber, D., 1991. **Review of the biology and host plants of the Australian longhorn beetle *Prosoplus iratus* (Pascos) (Col: Cerambycidae)**. *Bull. Annls. Soc. r. belge Ent.* 127:401-5. Qld & NE NSW sp. 8 larval food plants.

Phillips, D.J., Olsen, P.D., Rentz, D.C.F. & Lawrence, J., 1991. **Observations on the diet of the Christmas Island Hawk-Owl *Ninox squamipila natalis***. *Emu* 91:250-1. Analysis of pellets regurgitated by this rare and endangered owl indicate a diet of nocturnal foliage-dwelling insects all Coleoptera (2 sp. Elateridae, 1 sp. Tenebrionid, 6 spp. Cerambycid, 1 sp. Chrysomelid) except for *Gryllacris rufovaria* (Orthoptera).

Levot, G.W. & Hughes, P.B., 1990. **Controlling flies on poultry farms**. *Agfact AE42* NSW Agriculture and Fisheries, 5 pp., \$1.50. Major pests, minor pests, control with pesticides, hygiene, predators & parasites.

Levot, G.W., 1991. **Mite and lice pest control in commercial poultry**. *Agfact AE53*, NSW Agric. & Fisheries, 4 pp., \$1.25. Poultry red mite, northern fowl mite, general lice.

Shuter, E. & Westoby, M., 1992. **Herbivorous arthropods on bracken (*Pteridium aquilinum* (L.) Kunze) in Australia compared with elsewhere**. *Australian Journal of Ecology* 17:329-39. 15 insect and 2 mite species found feeding on bracken near Sydney over an 18 month sampling period. Compared to Britain and New Guinea, Sydney has Thysanoptera and Acari but lacks Coleoptera and Hymenoptera. Sydney has an abundance of pinna-sucking species and a dearth of miners.

Ridsdill-Smith, T.J., Hall, G.P. & Weir, T.A., 1989. **A field guide to the dung beetles (Scarabaeidae: Scarabaeinae and Aphodinae) common in pastures in south-western Australia**. *Journal of the Royal Society of Western Australia*. 71(2,3):49-58. Key to 3 native (*Onthophagus ferax*, *O. haagi*, *O. vermiculatus*) and 8 introd. (*Aphodius pseudolividus*, *Euoniticellus fulvus*, *E. intermedius*, *E. pallipes*,

Onitis alexis, *O.aygulus*, *Onthophagus binodis*, *O.taurus*) spp., with maps of distrib. and notes on biology. All the introductions have been deliberate except *pseudolividus*, presumably the species considered "native" by the authors who miscount the number of native species as "4". A key to all the CSIRO introduced dung beetles is sorely needed.

Storey, R.I. & Weir, T.A., 1990. New species of *Onthophagus* Latreille (Coleoptera: Scarabaeidae) from Australia. *Invertebrate Taxonomy* 3:783-815. 20 new spp. described & illustrated, distrib.maps. All from Qld.,NSW, top end of N.T. and east coast of W.A. Mainly collected with dung baited pitfalls and flight intercept/trough traps. 191 native species have now been described.

Last chance to study unique insect habitat. *Courier Mail* (Brisbane) 19 Dec. 1992, p.12. Dr.Chris Hill of James Cook Uni & Leanne Sommer from Qld. NPWS are studying the disturbance and abundance of Apollo Jewel butterfly, the bulbous ant plant and the ant *Iridomyrmex cordatus* in diminishing paperbark woodlands around Cardwell, Queensland.

Webs of Intrigue. *A Most Remarkable Planet.* ABC TV 18 Oct 1992. Densey Clyne, research, narration; Jim Frazier, camera; Roger Whittaker, producer: Australian Broadcasting Corporation in co-op with National Geographic Society and Australian Film Finance Corp. Amazing film of spider web and snare construction, predation, camouflage, mating, dispersal, etc. *Dinopus*, *Nephila*, *Dolomedes*, *Atrax*, *Pandercetes*, *Argiope*, *Latrodectus* and others.

Pest Wars. *British Broadcasting Corporation, Horizon.* Michael Jayston, narrator, Richard Vaughan writer, Sean Morris & Chris Haws, producers. OSF/InCA production ABC TV, 6 Dec.1992, *A Most Remarkable Planet.* A graphic review of biological control. Includes Geoff Wage interviews, locusts, cassava wasp, screwworm fly sterile releases, packaged predatory mites, humblebee pollination, etc.

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PETER KELLY RECEIVES 'ZOO' LESOUÉF MEMORIAL AWARD

At the December meeting of the Society it was announced that Mr Peter Kelly would receive the Zoo LeSouef Memorial Award. Peter has made a substantial contribution to entomology in Victoria over the last 30 years with his involvement in the Society and his numerous talks at Field Naturalist club meetings throughout Victoria. Peter was a council member of the Society from 1968 to 1992 and President from 1970-1971 and again from 1982-1983. His main interest has been in beetles and over many years he has travelled widely in Australia to collect, rear and photograph leaf beetles in the *Paropsis* complex. This research is now being prepared for publication and will be of great value to many professional and amateur entomologists collecting and working on this important group. Congratulations go to Peter from the Society for a well deserved honour.

CALL FOR NOMINATIONS: J.C. 'ZOO' LESOUÉF MEMORIAL AWARD

Nominations for 1993 Award are now invited. Details of background, nomination, etc were published in December 1992 issue of the *Victorian Entomologist*. Nominations must reach the Secretary at the following address by 30 September 1993:

The Secretary
Entomological Society of Victoria
c/- Museum of Victoria
71 Victoria Crescent
Abbotsford, Vic 3067

ON THE GRAPEVINE

Mark and Brenda Hunting are the proud parents of their newly arrived son Daniel Joseph, born on 12th December 1992. Mark has had to put aside his almost annual migration northward in search of butterflies and the beach and is getting used to parenting.

Nigel Quick has the following item for sale: U-V MOTH LIGHT. 2X20W 240V black-light tubes in aluminium case, with loose perspex "eye-safe" front, together with 12V dry-cell hand lamp for sorting. \$45. Phone Nigel on 056-29 2674.

Trevor Hawkeswood has requested that the following information regarding the new journal, "*Sydney Basin Naturalist*" be included in this issue for the information of our Society's members. The first issue of the journal, recently published, is 170 pages long, A4 - sized, double-columned laser-printed text on matt bond paper which is bound with a thin cardboard cover. There are 28 articles in the first issue, ranging from aboriginal food plants, birds, beetles, frogs, endangered species, snakes, jelly blubbers and many others. Subscription rate \$25 per year. For further information about the publication, write to the Editor, *The Sydney Basin Naturalist*, 68 Hilda Street, BLAXLAND NSW 2774.

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CONTRIBUTIONS TO THE *VICTORIAN ENTOMOLOGIST*

The Society welcomes contributions of articles, papers or notes pertaining to any aspect of entomology for publication in this Bulletin. Contributions are not restricted to members but are invited from all who have an interest. Material submitted should be responsible and original. Statements and opinions expressed are the responsibility of the respective authors and do not necessarily reflect the policies of the Society.

Contributions may be typed on A4 paper or *preferably* sent on an IBM formatted disk in *WordPerfect* or other word processing package (clearly specified) with an enclosed hard copy print out. Urgent submissions may be faxed.

The deadline for each issue is the final Friday of each odd month.

ADVERTISING

The charge for advertising is \$5.00 per half page.

The *Victorian Entomologist* is printed at the AGMEDIA, 3/166 Wellington Parade, East Melbourne, Victoria.

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19 February - General Meeting

Tim New - Mt Piper Report

19 March - Council Meeting

16 April - General Meeting

Talk by Ian Endersby on "Insect Watching"

21 May - Council Meeting

Scientific names contained in this document are *not* intended for permanent scientific record, and are not published for the purposes of nomenclature within the meaning of the *International Code of Zoological Nomenclature*, Article 8(b). Contributions are not refereed, and authors alone are responsible for the views expressed.

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